

IN THE CLAIMS:

Claims 1-8 (Cancelled)

Claim 9 (Currently amended) Apparatus for detecting a level of a surface of a liquid in a container having an upper opening, that apparatus comprising:

a support housing moveable between an upward unlocked position and a downward locked position, said support housing being adapted to mate with the upper opening of the container in said downward locked position;

an optical sensor device mounted in said support housing for non-intrusively measuring the level of the surface of the liquid in the container, said optical sensor device including a light emitting device for projecting incident light on the surface of the liquid in the container, and a light detecting device for detecting said incident light reflected from the surface of the liquid in the container; and

protective lenses placed in front of the light emitting device and the light detecting device.

Claim 10 (Currently amended) The apparatus of Claim 9, wherein said light emitting device comprises an infrared emitting diode, and said [[a]] light detecting device comprises a phototransistor.

Claim 11 (Original) The apparatus of Claim 9, wherein said light emitting device is positioned in said support housing to project light at an angle that is about 10° to 80° off vertical when said support housing is mounted to the upper opening of the container.

Claim 12 (Original) The apparatus of Claim 9, wherein said light emitting device is positioned in said support housing to project light at an angle that is about 37° off vertical when said support housing is mounted to the upper opening of the container.

Claim 13 (Original) The apparatus of Claim 9, wherein said light detecting device is positioned in said support housing to receive said incident light at an angle that is about 37° off vertical when said support housing is mounted to the upper opening of the container.

Claim 14 (Original) The apparatus of Claim 9, wherein said light emitting device and said light detecting device are positioned in said support housing so as to project and receive said incident light at an included angle of about 74°.

Claim 15 (Currently amended) The apparatus of Claim 9, wherein said protective lenses are permanently and hermetically secured on the support housing housing.

Claim 16 (Currently amended) The apparatus of Claim 9, wherein said protective lenses are incorporated in said support housing housing.

Claim 17 (Currently amended) The apparatus of Claim 9, wherein each of said protective lenses has [[have]] an outer surface that is inclined with respect to the vertical, to allow condensation to flow off the protective lenses.

Claim 18 (Currently amended) The apparatus of Claim 9, wherein each of said protective lenses has [[have]] an outer surface that is inclined at about 10° to 80° with respect to the vertical, to allow condensation to flow off the protective lenses.

Claim 19 (Currently amended) The apparatus of Claim 9, wherein each of said protective lenses has ~~[[have]]~~ an outer surface that is inclined at about 53° with respect to the vertical, to allow condensation to flow off the protective lenses.

Claim 20 (Currently amended) The apparatus of Claim 9, wherein said protective lenses and said light emitting device and said light detecting device define ~~defines~~ a volume in said support housing filled with a dry gas.

Claim 21 (Currently amended) The apparatus of Claim 9, wherein said protective lenses and said light emitting device and said light detecting device define ~~defines~~ a volume in said support housing filled with a vacuum.

Claim 22 (Currently amended) The apparatus of Claim 9, wherein said protective lenses and said light emitting device and said light detecting device defines a volume in said support housing filled with a solid translucent material.

Claims 23-33 (Cancelled)

Claim 34 (Currently amended) Apparatus for detecting a level of a surface of a liquid in a server container of a beverage maker for a transport system, said server container having an upper opening, that apparatus comprising:

a support housing moveable between an upward unlocked position and a downward locked position, said support housing being adapted to mate with the upper opening of the server container in said downward locked position;

an optical sensor device mounted in said support housing for non-intrusively measuring the level of the surface of the liquid in the server container, said optical sensor device including a light emitting device for projecting incident light on the surface of the

liquid in the server container, and a light detecting device for detecting said incident light reflected from the surface of the liquid in the server container; and

protective lenses placed in front of the light emitting device and the light detecting device.

Claim 35 (Currently amended) The apparatus of Claim 34, wherein said light emitting device comprises an infrared emitting diode, and said [[a]] light detecting device comprises a phototransistor.

Claim 36 (Original) The apparatus of Claim 34, wherein said light emitting device is positioned in said support housing to project light at an angle that is about 10° to 80° off vertical when said support housing is mounted to the upper opening of the server container.

Claim 37 (Original) The apparatus of Claim 34, wherein said light detecting device is positioned in said support housing to receive said incident light at an angle that is about 10° to 80° off vertical when said support housing is mounted to the upper opening of the server container.

Claim 38 (Original) The apparatus of Claim 34, wherein said light emitting device is positioned in said support housing to project light at an angle that is about 37° off vertical when said support housing is mounted to the upper opening of the server container.

Claim 39 (Original) The apparatus of Claim 34, wherein said light detecting device is positioned in said support housing to receive said incident light at an angle that

is about 37° off vertical when said support housing is mounted to the upper opening of the server container.

Claim 40 (Original) The apparatus of Claim 34, wherein said light emitting device and said light detecting device are positioned in said support housing so as to project and receive said incident light at an included angle of about 74°.

Claim 41 (Currently amended) The apparatus of Claim 34, wherein said protective lenses are permanently and hermetically secured on the support housing housing.

Claim 42 (Currently amended) The apparatus of Claim 34, wherein said protective lenses are incorporated in said support housing housing.

Claim 43 (Currently amended) The apparatus of Claim 34, wherein each of said protective lenses has [[have]] an outer surface that is inclined with respect to the vertical, to allow condensation to flow off the protective lenses.

Claim 44 (Currently amended) The apparatus of Claim 34, wherein each of said protective lenses has [[have]] an outer surface that is inclined at about 10° to 80° with respect to the vertical, to allow condensation to flow off the protective lenses.

Claim 45 (Currently amended) The apparatus of Claim 34, wherein each of said protective lenses has [[have]] an outer surface that is inclined at about 53° with respect to the vertical, to allow condensation to flow off the protective lenses.

Claim 46 (Currently amended) The apparatus of Claim 34, wherein said protective lenses and said light emitting device and said light detecting device define ~~defines~~ a volume in said support housing filled with a dry gas.

Claim 47 (Currently amended) The apparatus of Claim 34, wherein said protective lenses and said light emitting device and said light detecting device define ~~defines~~ a volume in said support housing filled with a vacuum.

Claim 48 (Currently amended) The apparatus of Claim 34, wherein said protective lenses and said light emitting device and said light detecting device define ~~defines~~ a volume in said support housing filled with a solid translucent material.

Claims 49-54 (Cancelled)